DOCUMENT RESUME

ED 232 959 SO 014 945

AUTHOR Rushdoony, Haig A.
TITLE Integrating Reading and the English-Language Arts in the Geography Curriculum.
PUB DATE 29 Oct 82
NOTE 32p.; Paper presented at the Annual Meeting of the National Council for Geographic Education (San Diego, CA, October 29, 1982). Some print type may be marginally legible.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Concept Teaching; Content Area Reading; Elementary Education; *Geographic Concepts; *Geography Instruction; *Interdisciplinary Approach; Language Arts; Learning Activities; *Map Skills; *Reading Comprehension; Teaching Methods
IDENTIFIERS *Semantic Mapping

ABSTRACT

Suggested activities for integrating language concepts and comprehension skills into elementary school geography instruction are presented. The activities focus on concept formation through semantic mapping and making analogies, and on comprehension through recalling, generalizing, interpreting, and making inferences. Semantic maps indicate spoke (like spokes radiating from the hub of a wheel), linear, and hierarchical relationships. In the activity presented, students first study physical and political maps of North and South America and answer questions related to certain cities' proximity to water. Next, the class develops a semantic map, the center of which reads "Cities in North America near Water." Three spokes which read "rivers," "lakes," and "oceans" radiate from the center. Finally, radiating from the three spokes are the names of cities situated at each location. Other possibilities for constructing semantic maps are also listed. Samples of written exercises to aid concept formation include drawing analogies; finding rhyming words; and identifying synonyms, homophones, and homographs. Comprehension exercises include answering multiple-choice questions on countries and rivers of North America, sequencing geographic and map ideas, drawing conclusions while reading a story and a map, and determining regional population shifts from a map and a graph. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Haig A. Rushdoony
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED232959

INTEGRATING READING AND THE ENGLISH-LANGUAGE ARTS IN THE GEOGRAPHY CURRICULUM*

by

HAIG A. RUSHDOONY
California State College, Stanislaus
Turlock, California 95380

Concern for integrating and applying Reading and English-Language Arts concepts and skills in the Geography/Social Science curriculum is an ever-present phenomenon. Two aspects will be treated in this presentation. They are (1) concept formation or building to develop (2) greater comprehension of the subject matter related especially to textual and graphic materials.

In recent non-geographic publications Standal (1981) and others (e.g., Maxwell, 1978; Nelson, 1978) have shown the limitations of applying readability formulas effectively in the content fields. They have indicated the need for a teacher to go beyond readability formulas with direct vocabulary instruction prior to having students read any textual material. Also, Wilson and Hammill(1982) found a wide variation in the ability of ninth graders to comprehend geography textbooks.

Whether teaching children and youth skills to read textual or graphic materials, a teacher needs to build comprehension of Geography by bridging the known with the new. Increasingly, experts in the fields of language and reading development are stressing the need for integrating

[1]Paper delivered at the National Council for Geographic Education Annual Meeting, October 29, 1982, San Diego, California.

SO 014 945

and applying language concepts with the content fields to bridge the gaps between comprehension of the known and unknown. This stress is apparently implemented in two recent articles in the Journal of Geography, wherein Atkins (1981) introduced basic map skills and concepts to the very young and Kirman (1981) introduced Landsat imagery to elementary grade children.

I

Thus, let us examine some ways in which teachers can help learners form concepts. In teaching Reading skills of varying types and for differing levels, scholars have suggested that instructional analysis of semantic mapping or networks can help learners conceptualize and organize their learnings to develop conceptual relationships. One scholar (Vaughn, 1982) has labeled this analysis, construct procedure, as it deals with concept structuring of a Social Science discipline. Other scholars have shown how a teacher may develop a question chart to teach the interconnection of subject matter (Cf Shur, 1981, and Michaelis, 1980). Our focus will be on the former, semantic mapping, to guide learners in describing, analyzing, synthesizing and applying concepts in the Geography program.

When commencing a study of landforms, we may begin by placing the word landforms on the chalkboard. Next, we would have the students open their atlas or textbook to find a map, e.g., of South America showing the types of landforms in the key (e.g., the Scott Foresman World Atlas, p. 56). We would then ask the class to identify a type of landform, cueing as needed to obtain a simple semantic map such as shown in Figure A.

Either during or after drawing data from the map, we may pose a question to serve as the focal point of the semantic map such as appears in Figure B.

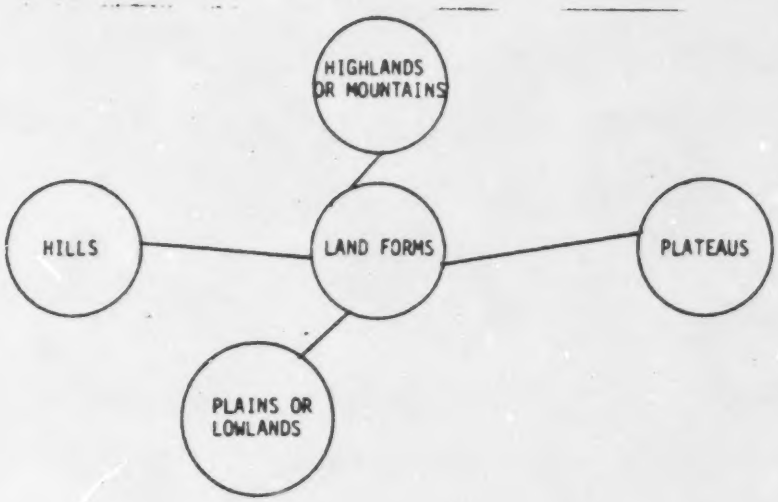


FIGURE A

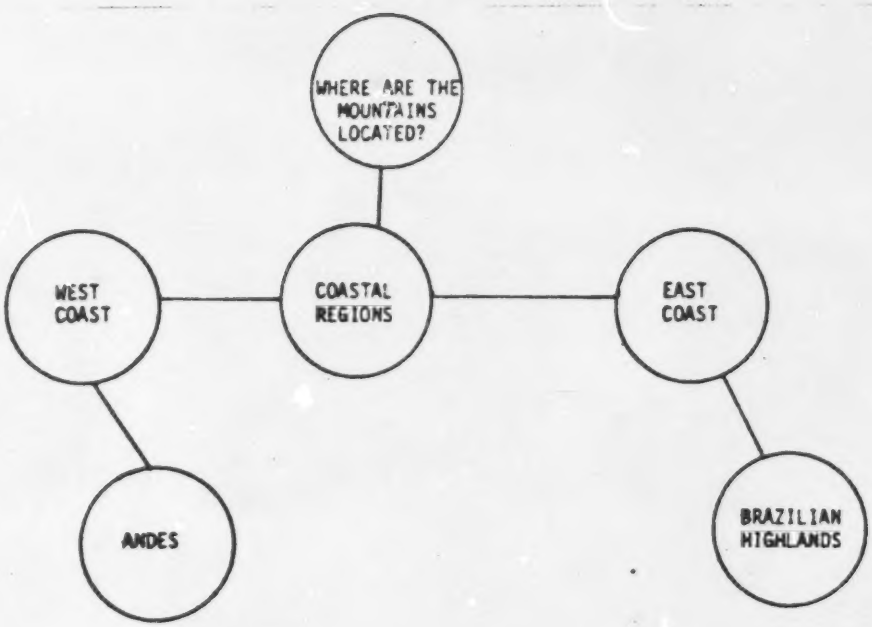


FIGURE B

We have thus developed this semantic network a further step to two levels or more in beginning to help learners organize their ideas and concepts.

Parts of Lesson #25 below illustrate how we may teach inferential reading of two maps comparing physical and political maps.

LESSON #25 - USING TWO MAPS TO GATHER DATA

Objective: To draw conclusions regarding location of cities by relating and inferring data from two different types of maps: physical and political

PREPARATION

Materials

Copies of Maps #12 and #13 for every other student
Transparencies of or projections of Maps #2, 10, 12, and 13 on oak tag (24X36 inches)
Overhead projector and transparency pen or crayon
Copies of Group Activity E for every other student

LESSON

1. Divide the class into teams of two and distribute Map #12 to each pair. Show Map #12 and say: In the last lesson we read and interpreted a "Part of a Road Map." Today we will examine two different types of maps.
2. Ask: What is the title of Map #12? What do we mean by a physical map?
   - How do we know directions on this map? (North Pole indicated; grid lines to and from North Pole are north/south lines and the other lines indicate east/west)
   - What symbols are shown in the key?
3. Say: Let's look at our new map (Map #12).
   - Where do we find the greatest elevation? (West)
   - How do we know that it's West? (Most of the shadings are there)
   - Where else is there a mountainous area? (East)
   - Where do we find plains or lowlands along the coast or shore? (Pacific and Atlantic Oceans, Gulf of Mexico, Hudson Bay, and Beaufort and Bering Seas)
   - What is the land like in Central North America? (Lowlands or Plains, called The Great Plains)
   - What can we say about the mountainous area along the western part of North America? (Continuous; you may wish to go into the chain of mountain ranges and their names, showing Map #2 also to follow the continuity of the Andean range.)

4. Show Map #13 and say: We've been looking at a physical map of North America. What kind is this one? (Political; non-physical) You remember that a physical map shows the relief of the land--its elevation or lack of it. A political map shows us states or provinces, or countries by using boundary lines.
5. Distribute a copy of Map #13 to each pair of learners and ask:
   - How can we tell directions? (North Pole indicated; grid lines to and from North Pole are north/south lines and the other lines indicate east/west.)
   - How many symbols on the map?
   - What are they? (Graphic scale; national boundaries; national capitals; other cities; rivers)

* * * * *

We may then follow up with an activity such as E regarding the the location of cities--their accessibility to water or the lack of accessibility.

After the lesson and follow-up activity we may develop with the class a semantic map such as appears in Figure C.

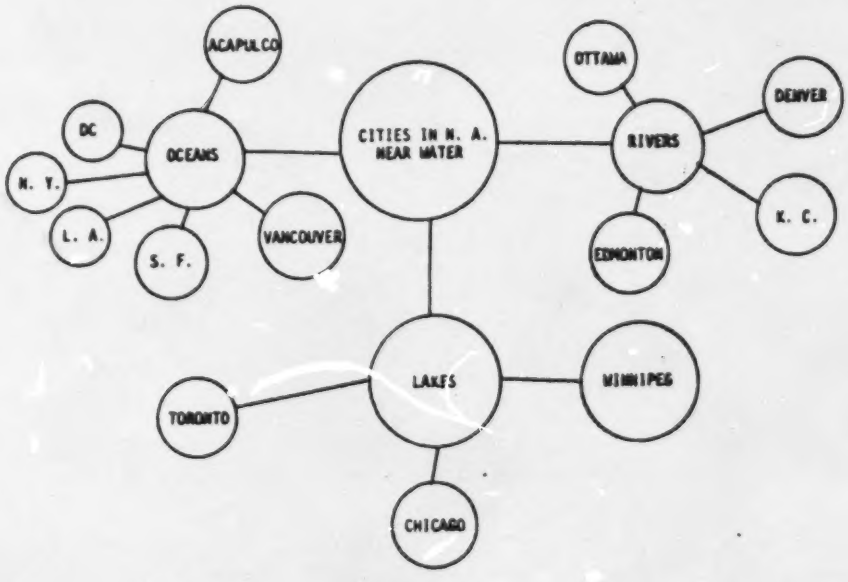


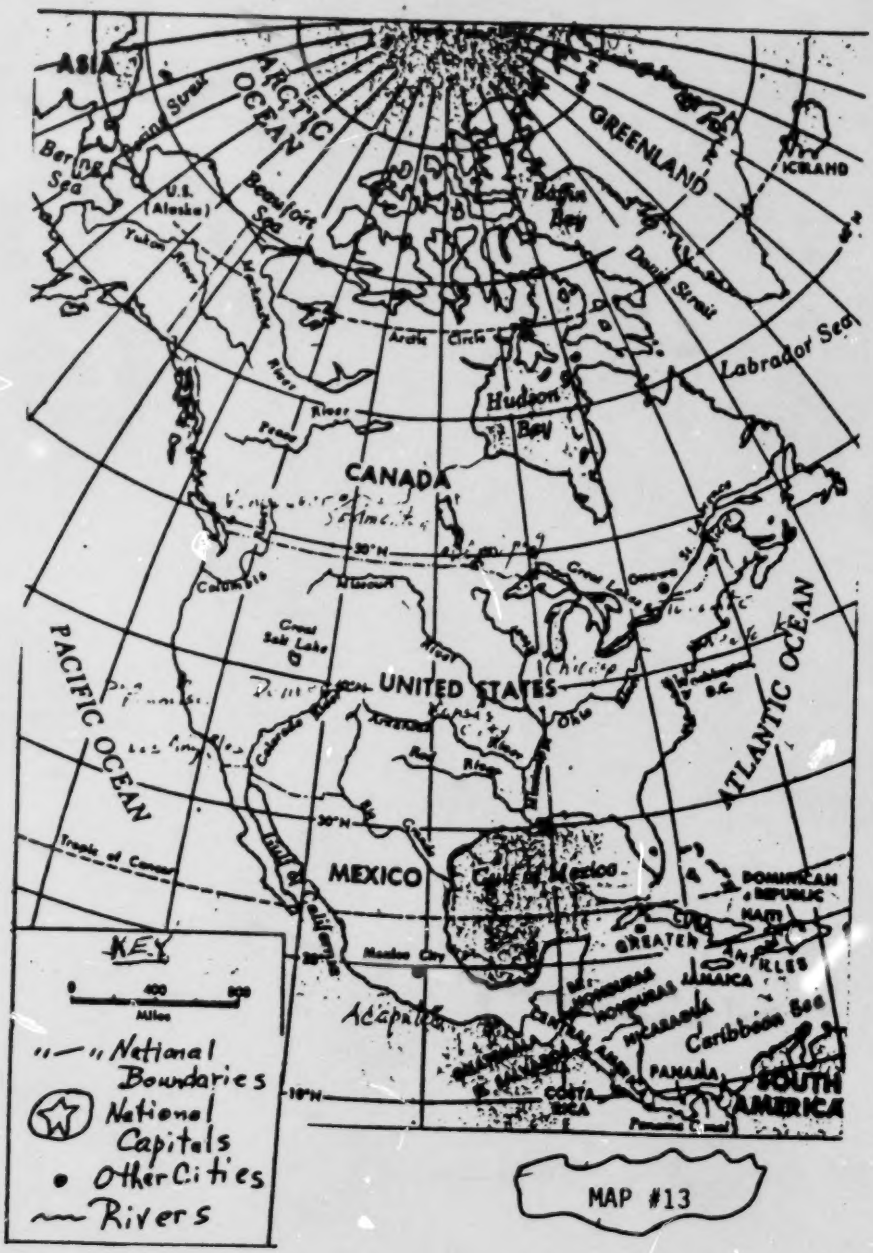
FIGURE C

BEST COPY AVAILABLE

PHYSICAL MAP OF NORTH AMERICA

BEST COPY AVAILABLE

SELECTED CITIES OF NORTH AMERICA



Name _____ Name _____

DRAWING CONCLUSIONS FROM TWO MAPS

Activity E

Directions: Using Maps #12 and #13 answer the questions below.

1. Which North American city is not located near water?

_____

All other cities are located in or near water.

2. Which six cities are near or along oceans?

_____ _____

_____ _____

_____ _____

3. Which three are near or along lakes?

_____ _____ _____

4. Which four cities are located near or along rivers?

_____ _____

_____ _____

Besides being near water, let's see what else we can find out about the location of cities in North America. Be sure to especially use the key in Map #12.

5. In the west, where do the cities seem to be located?

_____

6. In the central part of North America, where do the cities seem to be located? _____

7. In the eastern part of North America, where do thy seem to be located?

_____

After the two-level network depicted in Figure C, we can re-ask the question and use it with the class as the central node . . . only this time orienting our semantic map thusly.

We would add oceans, lakes, and rivers around the central node without regard to direction and link them to the central node as illustrated below in Figure D.

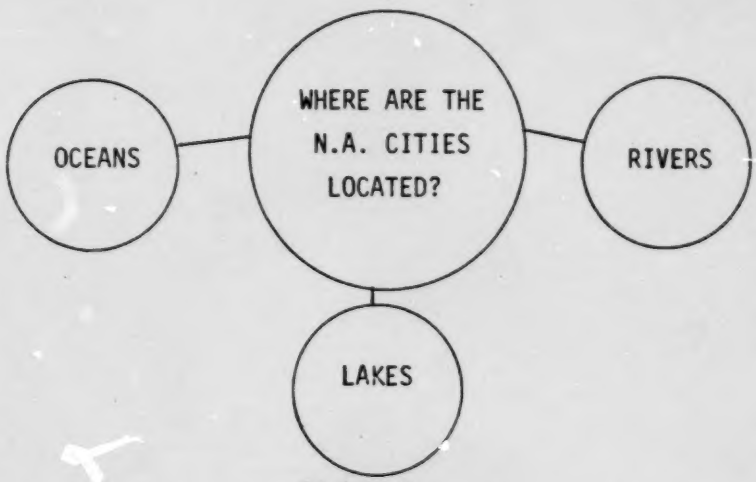


Figure D

The orientation would enter at the second level wherein each city would be plotted in terms of whether it were located on the east or west coast in terms of North America and its great oceans. Also, there would be a north-south relationship among the cities. The same procedure would be used in linking river and lake cities of North America as shown in Figure E below.

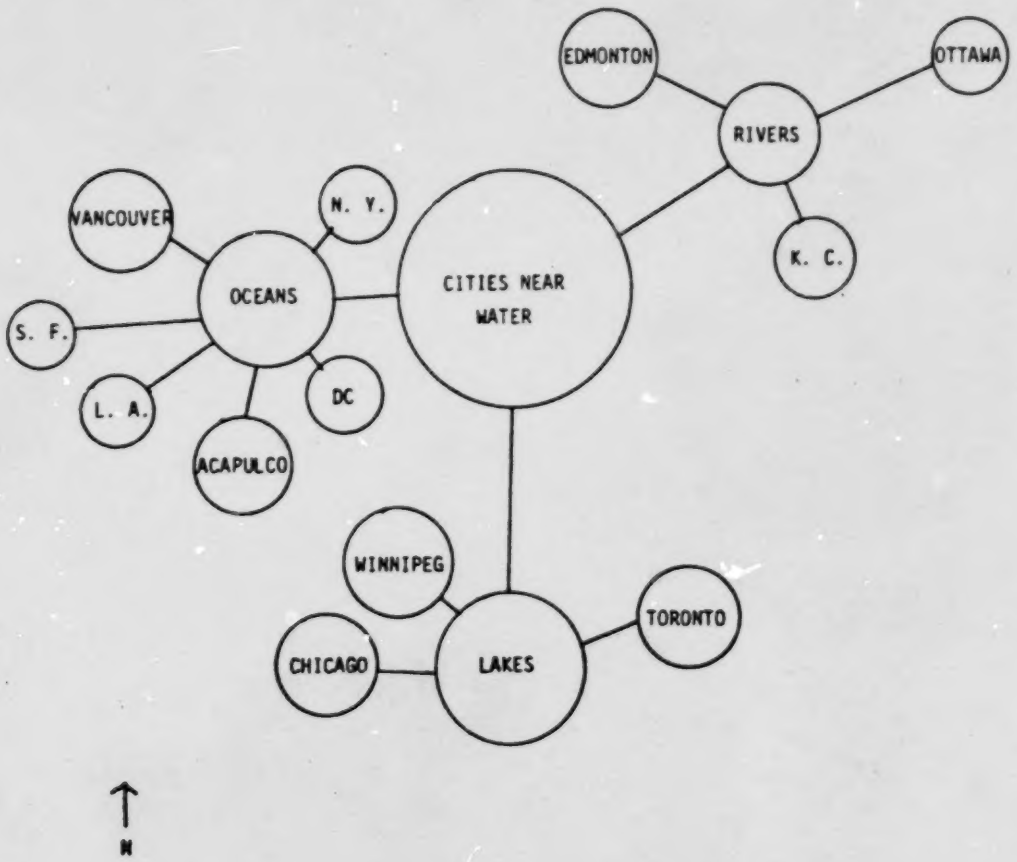


FIGURE E

A fourth non-related descriptive node could be linked to the central node-- --and linked to the one North American

city on Map #13 without access to a major waterway, namely, Mexico City. We can now readily see why Vaughn calls this semantic mapping, constructing.

These types of semantic maps indicate a spoke relationship like the spokes of a wheel. The nodes are linked by lines or arrows indicating the relationships. For example, we may wish to interconnect the nodes lakes, rivers, and oceans to show, for example, that Chicago's or Toronto's access to the ocean would be in that direction. Or, we may wish to plot a separate semantic map to show this as a linear relationship.

On the other hand, a hierarchical relationship may be drawn such as indicated in Figure F if we wish to dramatize elevation or landforms from the lowest to the highest elevation. This may be further completed by adding examples of mountains and other landform types as we did in the spoke network shown in Figure E regarding cities near water.

Other ways to integrate the Reading-Language Arts in the Geography curriculum are to work with analogies from map reading studies, for example. The first way deals with rhyming words (See first portion of Exercise #3 on the next page). A second way draws analogies in sentences (See portion of Exercise #7). A third way would be to use synonyms

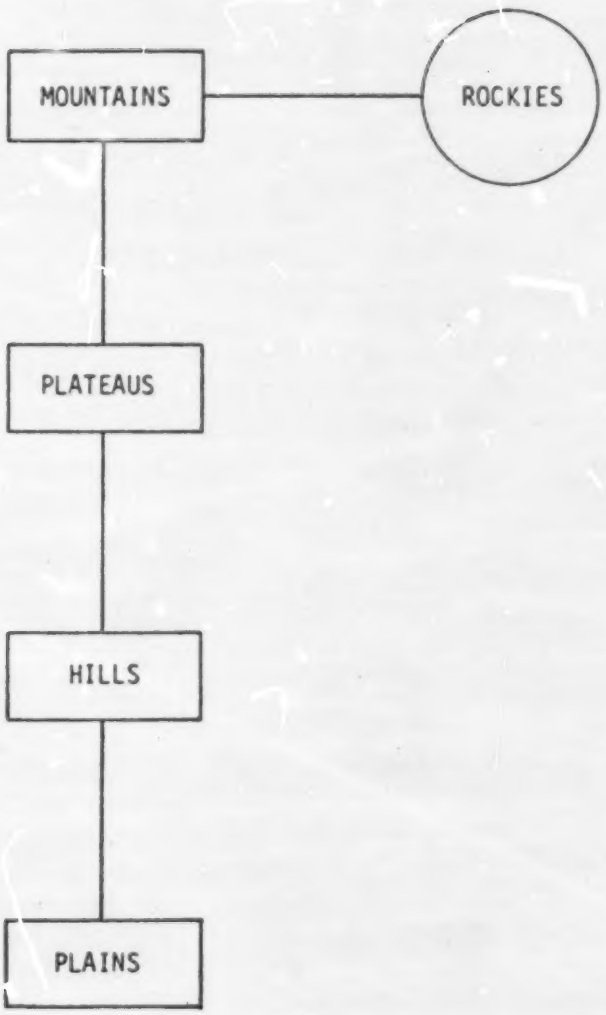


FIGURE F

Name _____

3. FINDING RHYMING WORDS

Directions

Underline the one word or phrase that best completes each sentence.

1. The word that rhymes with east is -

   a. feast.
   b. fat.
   c. best.
   d. guest.

2. The word that rhymes with south is -

   a. north.
   b. pout.
   c. mouth.
   d. month.

3. The word that rhymes with down is -

   a. up.
   b. sup.
   c. clown.
   d. clone.

4. The word that rhymes with cup is -

   a. up.
   b. jump.
   c. clap.
   d. tuck.

5. The word that rhymes with most is -

   a. mote.
   b. best.
   c. test.
   d. coast.

6. The word that rhymes with sliver is -

   a. silver.
   b. flipper.
   c. river.
   d. never.

7. The word that rhymes with maps is -

   a. caps.
   b. pats.
   c. cats.
   d. robs.

8. The word that rhymes with man is -

   a. clan.
   b. clam.
   c. clambake.
   d. clammer.

Name _____

7. DRAWING ANALOGIES IN SENTENCES

Directions

Underline the one missing word that best completes the sentence.

1. To orient yourself, you need to find the compass _____ on the map.

   a. pose c. rose

   b. horse d. doze

2. To know what the symbols in the map represent, you need to find the _____.

   a. bee. c. sea

   b. key d. tree

3. The antonym of east is _____.

   a. west c. vest

   b. best d. guest

4. The symbol for a city is often plotted on a map with a _____.

   a. lot c. dot

   b. cot d. pot

5. A river is often plotted on a map with a _____.

   a. fine c. dine

   b. mine d. line

6. A road or highway is often plotted on a map with a _____.

   a. fine c. dine

   b. mine d. line

or antonyms separately or interchangeably. A fourth way to integrate would be the use of homonyms--the use of homographs and homophones--such as appears in Figure G below.

HOMOGRAPH EXAMPLE

1. He received a map as a present.
2. Did she present him with a map?

HOMOPHONE EXAMPLE

1. Was there waste in dredging that lake?
2. He fell in the lake waist high.

Figure G

Other types of vocabulary/concept development are available to us but space necessitates moving to relating concept formation or building to the second portion of our presentation ... comprehension of the subject matter related especially to reading and interpreting graphic and textual material.

II

A basic comprehension skill is reading for information. Reading for information--literal and interpretive--may be easily done by preparing reading exercises such as Exercise #14 in conjunction with Map #13 used earlier. These can be presented with teacher guidance or may be prepared as student self-directed activities (See portion of Exercise #14).

14. SEEING HOW COUNTRIES AND RIVERS OF NORTH AMERICA MATCH UP IN LOCATION AND SIZE

Using Map #13, circle the letter of the word or set of words that best answers each sentence or question.

1. Which one of the following countries is the smallest in size?

a. Canada
b. Cuba
c. Mexico
d. The United States

2. Which one of the following countries is the largest in size?

a. Canada
b. Cuba
c. Mexico
d. The United States

3. Which one of the following is an island country?

a. Canada
b. Cuba
c. Mexico
d. The United States

4. Which one of the following rivers appears to be the longest?

a. Colorado River
b. Columbia River
c. Mississippi River
d. Rio Grande River

5. Which one of the following rivers appears to be the shortest?

a. Colorado River
b. Columbia River
c. Mississippi River
d. Rio Grande River

6. Which one of the following rivers does not empty or end at a gulf?

a. Colorado River
b. Columbia River
c. Mississippi River
d. Rio Grande River

7. Which one of the following island nations is the smallest in size?

a. Cuba
b. Dominican Republic
c. Haiti
d. Jamaica

BEST COPY AVAILABLE

Using two processes for obtaining information--recalling and generalizing--relevant to both Geography and Reading are based upon previous map and geographic study. Through an activity such as Exercise #15 we can help our learners build comprehension of the concepts taught earlier (See second page of Exercise # 15 below).

RECALLING AND GENERALIZING WHAT I'VE LEARNED

(continued)

6. Contour lines are used to show an air view of _____.

   a. cities
   b. oceans
   c. elevation
   d. population

7. A cross section is used to show a side (ground) view of the earth's _____.

   a. elevation
   b. color
   c. continents
   d. population

8. A relief map is used to show _____.

   a. elevation
   b. color
   c. continents
   d. population

9. A map which shows how high or low the land and water are may be called a _____.

   a. political map
   b. population map
   c. neither a nor b
   d. both a and b

10. A map which shows the heighth and depths of land and water may be called a _____.

   a. relief map
   b. physical map
   c. neither a nor b
   d. both a and b

Interpreting and sequencing geographic and map ideas are also relevant to geographic comprehension. Reading Exercise #19 shown in part below exemplifies organizing and comprehending data at still another level.

INTERPRETING AND SEQUENCING GEOGRAPHIC AND MAP IDEAS

6. You know from where you are beginning and your destination. What do you do next?

   a. determine the distance using the scale

   b. find the beginning and ending locations

   c. find the scale

   d. find and trace the route to your destination.

7. Now that you know how to reach your destination, you want to know how far it is. What must you do first?

   a. determine the distance using the scale

   b. find the beginning and ending locations

   c. find the scale

   d. find and trace the route to your destination

8. What do you do next to find out how far away your destination is?

   a. determine the distance using the scale

   b. find the beginning and ending locations

   c. find the scale

   d. find and trace the route to your destination

9. If you want to know where the gas stations and restaurants are along the way, where must you look on the map first?

   a. compass rose c. along the route

   b. legend d. scale

10. Having found the symbols for gas stations and restaurants, where on the map do you look next?

   a. compass rose c. along the route

   b. legend d. scale

Inferential reading is the highest level of comprehending any type of written text. It can take many forms. Let us look at two examples. One example would have students read and compare data from a map and graph such as this activity (Exercise #17) does to determine the regional population shifts between the 1970 and 1980 census.

Another example of inferential reading would be to utilize both a story and a map (#13) wherein the reader would need to read again both sources from which to draw inferences. The complete story and exercise (#27) are reproduced to illustrate this example of inferential reading.

Summary and Conclusion

During this short presentation we dealt with integrating and applying language concepts and reading comprehension skills within the Geographic curriculum. We focused the illustrations upon concept formation to develop comprehension of the geographic content under study. In concept formation we utilized semantic mapping from simple to complex, with and without interconnections, showing both spoke and hierarchical relationships. A second form of vocabulary and concept formation utilized was four ways to teach analogies which parenthetically are a major ingredient of the S.A.T.

We next moved our attention to build comprehension with the concepts formed. We showed exercises and activities for applying these concepts in informational and map reading, in recalling and generalizing geographic data, to interpreting and sequencing geographic and map ideas through reading. Finally, two examples of inferential reading were shown to develop the highest form of comprehending geographic data.

I would like to close with a personal note regarding this topic. While writing a map book for teachers utilizing reading skills similar to those discussed in this paper, a former editor suggested that my

book be entitled, The Language of Maps. At press time, this layman's concept held and the title remains most befittingly. Today, in showing ways to integrate the Reading and English-Language Arts in the Geography curriculum we have dealt with language--the language of maps, the language of graphs, the language of all graphic and textual material and most of all, teaching the language and concepts of Geography.

27. DRAWING CONCLUSIONS WHILE READING A STORY AND MAP

+ USING MAP #13 +

Using Map #13, read the story below. Then, circle the letter of the word or phrase which best answers each question.

STORY

Evan lives in Toronto. He is going to Acapulco for a winter holiday! On the way to Acapulco his airline must make a two-hour stop at Chicago, just 428 miles away. Evan plans to take a taxi tour of Chicago during the stopover.

Evan boarded the plane and it took off at the scheduled time. All went well until just before the plane was to land. The pilot reported that there was a snow storm in Chicago. They would continue on to Kansas City instead, where landing would be safer.

The pilot said this change would make some problems. There was no flight from Kansas City to Acapulco. Passengers would have to fly from Kansas City to San Francisco, and then go on to Acapulco. The San Francisco flight was not scheduled to leave Kansas City until the next morning. Upon landing in Kansas City, the airline would take the passengers to a hotel then return them to the airport for the morning flight. In San Francisco, passengers would take another flight to Acapulco. The pilot made everybody feel better by reporting that the temperature in Acapulco was 94 degrees.

Evan sat back disappointed and a little confused by all these changes. He was at least glad for one thing, though. He had planned to spend his winter holiday in Acapulco, not Chicago! He put his head back and went to sleep with a smile on his face.

27. DRAWING CONCLUSIONS WHILE READING A STORY AND MAP (continued)

Circle the letter of the word or phrase that best answers each question.

1. Which statement best describes Evan?

   a. He lives in Canada and is going to Cuba

   b. He lives in the United States and is going to Canada

   c. He lives in Canada and is going to California

   d. He lives in Canada and is going to Mexico

2. Evan is going on a vacation to which city?

   a. Chicago
   c. San Francisoo

   b. Acapulco
   d. Kansas City

3. Where is Evan's winter holiday destination located?

   a. west coast
   c. inland

   b. east coast
   d. Atlantic seaboard

4. Why was his plane flying to Kansas City instead of Chicago?

   a. It was hijacked
   c. So he could sleep overnight

   b. Bad weather
   d. To take him to San Francisco

5. When Evan left Toronto, his plane was headed southwest to Chicago. To reach Kansas City, in which direction did the plane now need to go?

   a. southeast
   c. west

   b. southwest
   d.. south

27. DRAWING CONCLUSIONS WHILE READING A STORY AND MAP

(continued)

6. Why would the next flight take him from Kansas City to San Francisco and not directly to his destination?

   a. There was no flight from Kansas City to his destination

   b. It allowed Evan to see part of San Francisco

   c. It allowed him to visit another city

   d. Evan wanted another stop

7. From Kansas City, the next day Evan's jet would fly in which direction?

   a. southeast
   c. west
   b. southwest
   d. south

8. To reach his destination from San Francisco, Evan's flight would go in which direction?

   a. southeast
   c. west
   b. southwest
   d. south

9. On Evan's flight, which city is located along or near the Great Lakes?

   a. Chicago
   c. San Francisco
   b. Kansas City
   d. Acapulco

10. San Francisco is located along which coast?

   a. West Coast
   c. both a and b
   b. Pacific Coast
   d. none of the above

11. Which city is not an inland city?

   a. Toronto
   c. San Francisco
   b. Chicago
   d. Kansas City

27. DRAWING CONCLUSIONS WHILE READING A STORY AND MAP

(concluded)

12. Which west coast city was having warm winter weather?

    a. San Francisco
    b. Acapulco
    c. both a and b
    d. none of the above

13. The San Francisco-Acapulco flight would most likely cross which one of the following rivers?

    a. Mississippi
    b. Missouri
    c. Arkansas
    d. Colorado

14. Why was Evan glad that he was going to spend his holiday in Acapulco and not Chicago?

    a. It was where he planned to go
    b. He couldn't stop in Chicago
    c. It was so warm in Acapulco
    d. It was on the West Coast

15. When the story ended, where was Evan?

    a. Landing in Acapulco
    b. Enroute to San Francisco
    c. Overnight in a Kansas City hotel
    d. In the plane around Chicago

17. DETERMINING REGIONAL POPULATION SHIFTS FROM A MAP AND GRAPH

Using Map #19 and Figure 6, circle the letter of the words, numbers, or phrases that best answers each question or completes each sentence.

1. Which Census Region had the greatest gain in metropolitan population between 1970 and 1980?

   a. North Central
   b. Northeast
   c. West
   d. South

2. Which Census Region had the second greatest gain in metropolitan population?

   a. North Central
   b. Northeast
   c. West
   d. South

3. Which region had the most gain in shift of population to non-metropolitan areas?

   a. North Central
   b. Northeast
   c. West
   d. South

4. Which region had the second greatest gain in shift of population to non-metropolitan areas?

   a. North Central
   b. Northeast
   c. West
   d. South

5. Which region showed the most gain in population?

a. North Central
b. Northeast
c. West
d. South

6. What was its overall gain in population from 1970 to 1980?

a. 9.4%
b. 10.4%
c. 37.29%
d. 53%

7. Which region had the least overall growth in population?

a. North Central
b. Northeast
c. West
d. South

8. What was its overall gain in population from 1970 to 1980?

a. 9.4%
b. 10.4%
c. 37.29%
d. 53%

9. Which region lost population during that ten-year period?

a. North Central
b. Northeast
c. West
d. South

10. Where was the loss?

a. Metropolitan
b. Non-metropolitan
c. both a and b
d. Suburban

11. What can be said about the shift of U.S. population between 1970 and 1980?

a. Little to no gain in population
b. Shift of the population to the North Central Region
c. Shift of the population to the South
d. Shift of the population to the Sunbelt

12. Which Western Sunbelt state had the greatest percentage of population growth?

a. Arizona
c. Utah
b. Nevada
d. Wyoming

13. Which Western Sunbelt state had the second greatest percentage of population growth?

a. Arizona
c. Utah
b. Nevada
d. Wyoming

14. The population gain in both of these states was more than _____ percent.

a. 50
c. 70
b. 60
d. all of these

15. The Western Sunbelt state with the least percentage of population growth was _____.

a. California
c. Oklahoma
b. Montana
d. Washington

16. The Western Sunbelt state with the second least percentage of population growth was _____.

a. California
c. Oklahoma
b. Montana
d. Washington

17. The population gain in these two states with the least percentage growth was less than _____ per cent.

a. 13
c. 17
b. 15
d. 19

18. What is the most accurate picture of growth for the Western Sunbelt?

a. 12%-53%
c. 15%-65%
b. 13%-64%
d. 22%-68%

19. What was the total population of the Western Sunbelt for 1980?

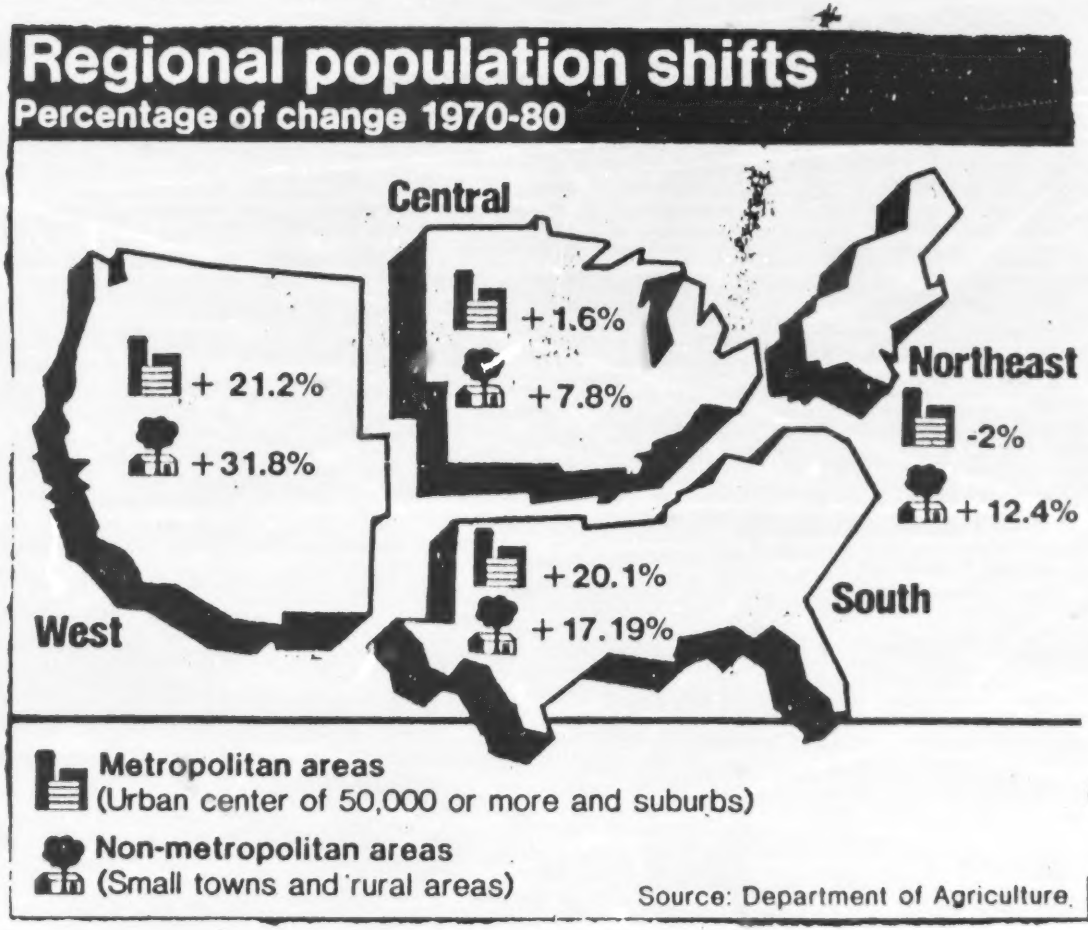
a. Over 40 million
c. Over 60 million
b. Over 50 million
d. not give

20. Map #19 and Figure 6/4 indicated the population shift from _____.

a. 1950-1980
c. 1960-1980
b. 1970-1980
d. 1980-1990

Regional population shifts

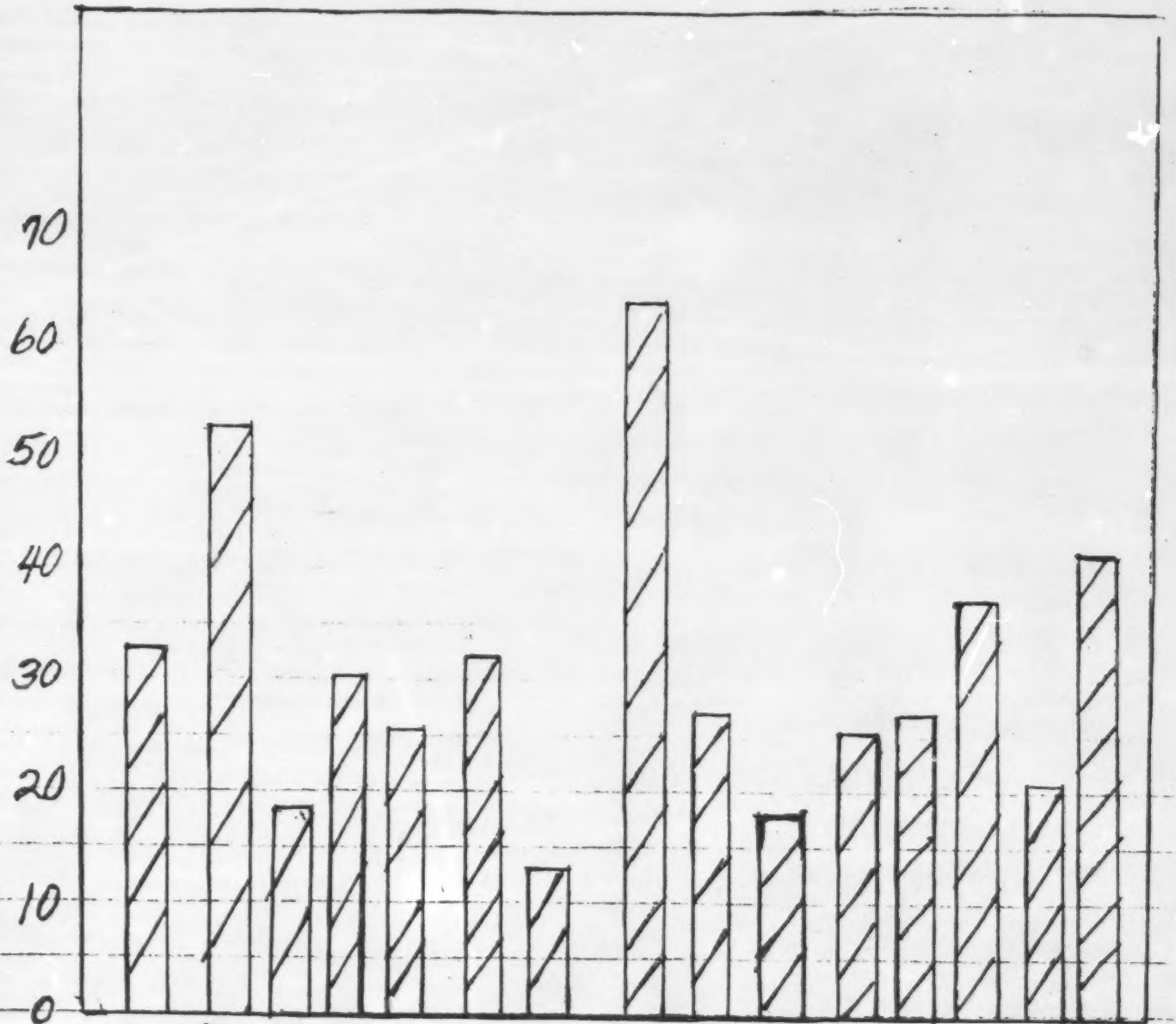
Percentage of change 1970-80



MAP #19

*San Francisco Sunday Examiner & Chronicle, August 23, 1981, Section A, p. 14.

PERCENTAGE OF GROWTH IN POPULATION OF THE WESTERN SUNBELT STATES FROM 1970 TO 1980



TOTAL 1980 POPULATION: 60,086,707

Figure 6

References

1. Atkins, Cammie L. "Introducing Basic Map and Globe Concepts to Young Children," Journal of Geography, 80 (November 1981), 228-33.

2. Kirman, Joseph M. "Use of Band 5 Black-and-White Landsat Images in the Elementary Grades," Journal of Geography, 80 (November 1981), 224-28.

3. Maxwell, Martha. "Readability: Have We Gone Too Far?" Journal of Reading, 21 (March 1978), 525-30.

4. Michaelis, John U. Social Studies for Children: A Guide to Basic Instruction, Seventh Edition. Englewood Cliffs, NJ: Prentice-Hall, 1980.

5. Nelson, Joan. "Readability: Some Cautions for the Content Area Teacher," Journal of Reading, 21 (April 1978), 620-25.

6. Rushdoony, Haig A. The Language of Maps. San Francisco: Fearon/Pitman. 1983.

7. Schur, Joan Brodsky. "Question Charts and Interconnection Charts," Social Education, 45 (April 1981), 273-75.

8. Standal, Timothy C. "How to Use Readability Formulas More Effectively," Social Education, 45 (March 1981), 183-86.

9. Vaughn, Joseph L., Jr. "Use the Con Struct Procedure to Foster Active Reading and Learning," Journal of Reading, 25 (February 1982), 412-22.

10. Wilson, Cathy R. and Carol Hammill. "Inferencing and Comprehension in Ninth Graders Reading Geography Textbooks," Journal of Reading, 25 (February 1982), 424-28.